

Product Overview

CAT4003B: LED Driver, Constant Current Programmable, with 32 Dimming Levels

For complete documentation, see the data sheet.

The CAT4003B and CAT4004B provide respectively three and four matched low dropout current sources to drive LEDs. The CAT400XB requires no external RSET resistor. The LED current is internally set to 25 mA when the device is first enabled. Each LED channel includes an individual control loop allowing the device to handle a wide range of LED forward voltages while still maintaining tight current matching. The EN/DIM logic input supports the device enable and a digital dimming interface for setting the LED channel current with 32 linear dimming levels. LEDs can be powered directly from a Lithium-ion battery due to the low dropout (75 mV at 20 mA) current sinks. Package options are available in the 4-channel tiny 8-pad UDFN 2 mm x 2 mm with a max height of 0.55 mm, and 3-channel in the 6-lead TSOT-23, TSOP and SC-70.

Features

- Low Dropout Driver 75 mV at 20 mA
- Dimming via 1-wire EZDim™ Interface
- 3, 4 LED Current Sinks with Tight Matching
- 32 Dimming Levels
- No Switching Noise
- Shutdown Current less than 1 μ A
- 25 mA Max LED Current per Channel
- Thermal Shutdown Protection

Applications

- LCD Display Backlight

Benefits

- Can drive LEDs at lower VIN
- higher resolution dimming

End Products

- Mobile Phones
- Digital Still Cameras

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Created on: 3/31/2020